PORTAGE COUNTY AMATEUR RADIO SERVICE

The RADIOGRAM

When All Else Fails ~ Amateur Radio Works

~ Official Newsletter of the Portage County Amateur Radio Service, Inc. ~

PCARS - the 2018 Hamvention® Club of The Year

December 2024 - Volume 19 Number 12

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Volume 19 December 2024 Number 12

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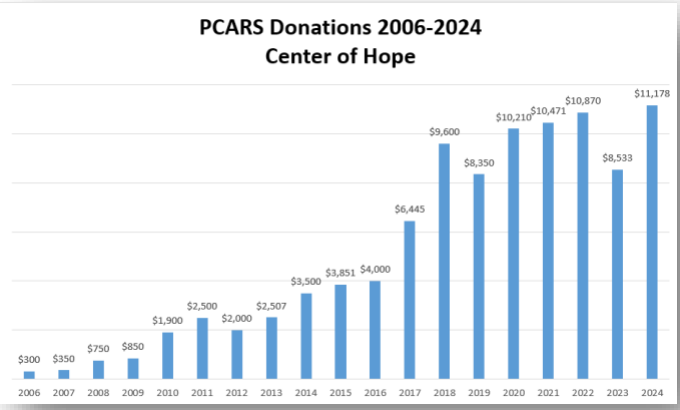
PORTAGE COUNTY AMATEUR RADIO SERVICE

From the President

Mike, KP4VZ
PCARS President

Center of Hope Fundraiser. We successfully accomplished an exceptional fundraising effort for the Center of Hope, I'm thrilled to share that our contribution of **$11,178.51** is our largest to date! I feel a tremendous sense of pride for this club and its commitment to the Center of Hope. Giving back to our community is a vital aspect of what we stand for. A heartfelt thank you to everyone for your kindness and support!



Congratulations to our newly elected officers! I want to express my gratitude to them for taking on the important task of leading PCARS into 2025. I'm confident that Jim (AC8NT) and Russ (NR8W) will do an awesome job moving the club ahead. They're aware it's going to be a lot of work, yet they bring forth innovative ideas that I believe will be well-received. I encourage everyone to assist and support them in their new roles.

Highlights from 2024
This year has been filled with numerous enjoyable events, reflecting our club's commitment to ham radio and community service, with hundreds of hours dedicated to these pursuits.

Our activities included the Freeze Your Acorns OFF (FYAO), various States QSO parties (contests), the Ohio BBQSO Party (open house), the Ham Radio Cruise Inn, four "ParkPeditions", two Replay for Kids events, four group builds, Field Day, OSPOTA, weekly meetings of our Special Interest Group, the PCARS monthly Flex net, weekly VHF/2M net, monthly general meetings, participation in the Scout Jamboree, local hamfests (CFARC & MARC), the Kent State Aero Expo on the Air, and a presentation at the Kent Library.

New equipment. We also added some new equipment for our members' enjoyment, including a Spectrum Analyzer, our fourth ICOM 7300, and a new Wi-Fi access point system for Field Day.

Renovations are currently underway at our club, including the installation of a new heater for Bay Two and the replacement of the entrance window.

I want to express my heartfelt thanks! Serving as president of PCARS this past year has been an incredible experience. I truly appreciate the chance to take on this role and the support I've received throughout the year. I really couldn't have done this without the constant support from so many club members who selflessly shared their time, talents, and helpful advice. It turned out to be an awesome year! We truly have the best Ham Radio Club in Northeast Ohio.

From the Vice President

Ken, WA8LRW
PCARS Vice President

November

- The monthly Meeting featured the Center of Hope fundraiser and extended 50/50 drawing.
- The election of new club officers was concluded with the following elected
    - Jim Wilson President
    - Russ Conklin Vice President
    - Tom “Parky" Parkinson 3rd year trustee
    - Paul Hyland Treasure
- The Soldering class at the Club Site was a great success; everyone completed their project. Thanks, John, for an excellent build.

December

- The monthly Meeting will be the Holiday Dinner

The end of December will mark the end of my term as vice president. I would like to thank all the members for their support and help. I have special thanks to the speakers, the antenna committee, the Field Day committee, and Mike Gonzalez, whose energy made it all possible.

From the Treasurer

Greg, KA8TOA
PCARS Treasurer

I have been blessed with good people helping me out and I want to thank all of you for that. I have been doing the best job I could and now it is up to someone else. I have learned a lot about 105c things. I like to think that I have made some good changes on the way things were being done. I am not perfect and never claimed that but, I feel confident that it was for the better of the club.

Remember we are volunteers and i believe in making things as easy as possible. All of us over the years have made this a better club by helping when needed and participating in the many facets of amateur radio. Our president is a go-getter and we have responded with selling things the club did not need and this has paid off in funding of the furnace in bay 2. Along with a generous donation of a silent key who cared for PCARS.

Congrats to Mike for stepping in and up to be president this past year and he has done a great job. As I finish my term and pass the pencil on, PCARS finances are in great shape. Membership is around the same and i think it speaks volumes about the club officers past and present. We lose a few from deaths and moves and gain new members during the year. Remember to speak up and step up. Let's continue with getting younger people involved with Amateur Radio,and support the new officers and thank them.

Happy Birthday PCARS Members

PCARS members having their birthday in **December:**

KD9ZDY	**Stephen**
N8AMY	**Amy**
K5JMS	**John**
N8XTH	**Deron**

KE8LWM	**Holly**
KP4VZ	**Michael**
K8IV	**Ed**
N8ND	**Mike**

KD8QDZ	**Christopher**
KB8UHN	**John**
KA8TOA	**Greg**

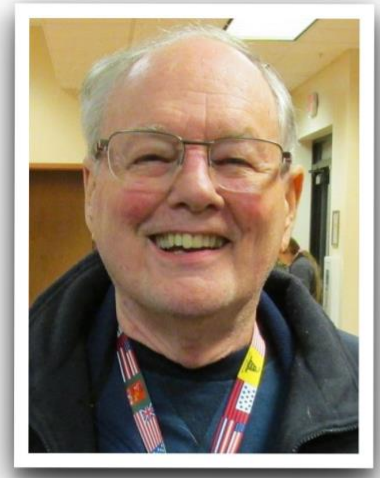
PCARS IO Group

Groups
Find or Create a Group
https://groups.io/g/PCARS
Help
Log In
Home
Messages
Hashtags
PORTAGE COUNTY AMATEUR RADIO SERVICE
PCARS K8BF
The Club that puts the FUN in Ham Radio!
PCARS@groups.io
Group Description
This is the discussion group of The Portage County Amateur Radio Service, Inc.
This site is for the members, by the members of PCARS.
Group Information
59 Members
1 Topic, Last Post: Feb 21
Started on Feb 21
Feed
Join This Group
or
Log In If You Are Already A Member
Group Settings
All subscribers can post to the group.
Posts to this group require approval from the moderators.
Posts from new users require approval from the moderators.
Messages are set to reply to group.
Subscriptions to this group do not require approval from the moderators.
Archives are visible to anyone.
Wiki is visible to subscribers only.
Members can edit their posts.
Members can set their subscriptions to no email.

Members are reminded that PCARS has a IO Group site dedicated to PCARS. It's a great site to sign up for and get on the mailing list for important PCARS information.

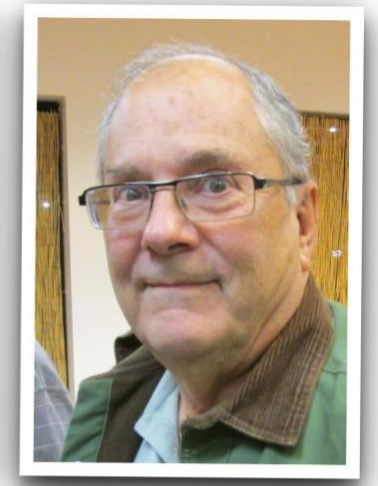
Check out the PCARS IO Group at: **https://groups.io/g/PCARS**

PCARS 2025 Officers

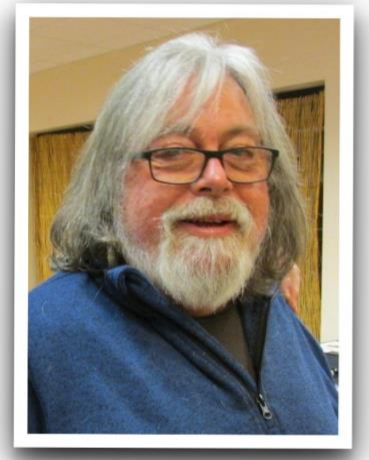


President
Jim - AC8NT

Vice President
Russ - NR8W

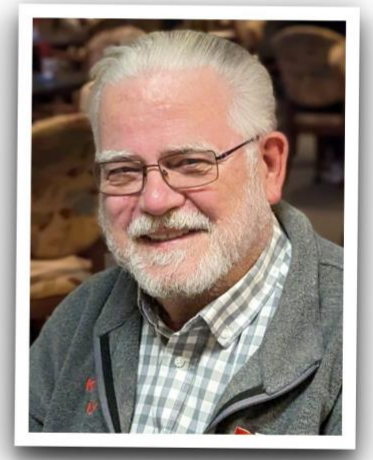


Treasurer
Paul - KE8EGF



1-Year Trustee
Mike - KB8TUY

2-Year Trustee
Gene - W8NET



3-Year Trustee
Tom - KB8UUZ

PORTAGE
COUNTY
AMATEUR
RADIO
SERVICE

Past President
Mike - KP4VZ

Soldering 101 Group Build

John, WG8X

A few weeks back, we held an organized event at the Club site. This one was a soldering class. No, we did not build QCX transceivers, with Surface Mount Devices. But rather, we built the simplest of simple; the European siren packaged as a soldering kit.

Ten students and a few instructors descended upon the club site on November 9th to learn the basics of soldering; a skill that is useful for all Ham operators. The soldering kits were easily found online at a minimal cost, and the rest of the supplies are stocked at the club site thanks to a grant from the ARRL.

I should mention that these group builds are more about socializing with fellow club members than about building stuff. Learning stuff is always good, though; right? In a mere 3 hours or so, everyone got their kits working, and left with either a new skill, or an addition to an existing one.

I'm hopeful to do another of these builds in the spring. That one will be a multi-band link dipole. Stay tuned for dates & more information.

Schedule of Events

Dec 2nd - PCARS Board Meeting at PCARS Club Site – 7 pm
Dec 7th - VE Test Session – 10 am
Dec 9th - PCARS Monthly Meeting – 7 pm

Special Interest Groups at the Club Site

First Tuesday Odd Months - **Digital Special Interest Group** - Moderator: Rick, K8CAV
First Tuesday Even Months - **HF WAS & DX Nets Special Interest Group** - Moderator: Gene, W8NET
Second Tuesday - **Portable Ops Special Interest Group** - Moderator: John, WG8X
Third Tuesday - **Antenna Special Interest Group** - Moderator: Bob, N8QE
Fourth Tuesday - **DX & Contest Special Interest Group** - Moderator: Chuck, W8PT
Fifth Tuesday - **Could Be Anything Special Interest Group** - Moderator: Rick, KD8WCK

Fourth Thursday - Net Night at the Club Site - 6:30 pm - Moderator: Tom, WB8LCD

PCARS Custom Coffee Cups - Limited Edition - Get One NOW

PCARS has obtained a **limited** number of special, custom-made coffee cups that are available only to members.

Portage County Amateur Radio Service
PORTAGE COUNTY AMATEUR RADIO SERVICE
K8BF
2018 Hamvention® Club of the Year

Supply is limited. If you are a current (PAID) member of PCARS you get one coffee cup for **FREE** !! The only catch is you have to claim it from the **Treasurer**. There is a list of current members and will check off your name when you get your **FREE** PCARS coffee cup.

There are a ***very*** **limited number of extra coffee cups** for sale at $5.00 each. **Contact the Treasurer for all of the details: Treasurer@portcars.org**

PCARS is on YouTube

That's right - PCARS is on YouTube. So, what does that mean? Hey, we have a place to put all kinds of videos that are about PCARS for the world to see.

https://youtube.com/@portagecountyamateurradios1933?si=09-NxUpDOoqdqTzc

An Antenna Project Completed!

Keith, KE8TQR

I Thought I'd send along a pic of the project I have been working on for over 2 years now. The tower is now vertical with all the antenna (except for the OCF Dipole, which I will hang on it later) on it. With the help of 9 friends and my lawn tractor, and using two lift points on the tower, it was lifted into the vertical position. The pleasure of finally seeing it standing tall with all the antenna was GREAT! It was a wonderful day with friends and I can't thank all of them enough.

The tower is from Universal Manufacturing whose shop is up in Michigan just north of Detroit. It's a 50 foot aluminum tower but since I went with one of their larger tower options, it is a thicker aluminum tube. I also went with a little different configuration than their standard ones because of the hefty antenna's I installed.

The two beam/Yagi antennas are both Italian made. The biggest one is made by Momobeam and is their Penta10. This is a 10 element Yagi and it is a multi band that does 20 to 10 meters. It weighs a bit more than 50 pounds fully assembled and was a chore to get on the mast pole. It also has no Traps which I'm told should make it a better performer. I'll have to get back to you on that.

The other Yagi is the Sirio mono band for 6m and as I said, an Italian manufacturer. It is a 5 element Yagi and I hope to use it along with my Kenwood TS-690S.

The final and top antenna is the Comet GP-15 Tri-Bander for 2m, 70cm and 6m. I used this antenna last year when I only had 30 feet of tower up and my mast pole clamped to it. I only used it on 2m and 70com and it worked really well. I also found that it worked surprisingly well on GMRS.

I've used a couple different coax cables from ABR24600 to CQ106 from The Wire Man as well as CQ105 8 wire Rotor Control Cable from them also. There is a DXE enclosure on the tower base and at the house corner for installing the Polyphasers and Shunt Protectors.

And for grounding, there are 24 8' 1/2" copper rods around the tower, in legs running from the tower and running to the house as well. After digging (OK, I used a Trencher) all the trenches and driving the ground rods (Pneumatic Hammer), I connected it all together with #2, 7 strand bare copper wire. The wife said she didn't care what I did as long as I kept the lightning outside.

I have a few more items to attend to, but once they are finished up, I should be back on the HF bands and seeing what these new antennas and 50 feet will do for me.

On The Road with WG8X

John, WG8X

Hi everyone, it's been a kinda/sorta busy month, but I did manage to get some operating in.

A few weeks back, Tim, AA4SS who is originally from Portage County visited from Virginia and we did some activating. We started near Salineville at Yellow Creek State Forest, then moved east to a couple parks in the northern panhandle of WV. To finish off the day, we hit one of Pennsylvania's State Game Lands. That was a total of 119 contacts, 4 parks, 3 states, and one new park for me. Tim left behind a Link Dipole (40M-20M-17M) that I'll be using as the basis for a group build in 2025.

Thinking that my work on the 4:1 balun was finished, I dove in to the ARRL SS-Phone. It worked fine on Saturday evening but died in the overnight hours. Waking up Sunday morning to a 5:1 SWR was no fun.

So, I wound a larger one, and swapped it out with the original in the Off-Center Fed dipole. While the antenna was down, I also replaced the PL-259 connecters on the coax leading to the antenna. So, I again have a working OCF Dipole. I've been doing a lot of 40 & 80 this last week. Its next test will be the ARRL RTTY Roundup in January.

While in the workshop last week, I took the opportunity to replace the DC connector on my FT-891. I had literally worn out the factory one. Luckily, a friend had printed out a new one for me several months ago. Once in a while, I think how I'd like to have a 3D Printer, but with so many friends who have them, why buy one? The new connector seems like it will last well, and if it breaks, I just get another one printed.

I was surprised last weekend to find a new Ohio POTA Reference. Lawrence Woods State Wildlife area (US-12057) sits right across the road from Lawrence Woods State Nature Preserve (US-9420) in Hardin County. It was well worth the 2 ½ hour drive the day before Thanksgiving. Also, since it's only one county over from Waldo Ohio, I knew where I was stopping for lunch. If you've not heard, G & R Tavern in Waldo serves up what some consider to be the best fried bologna sandwich in Ohio.

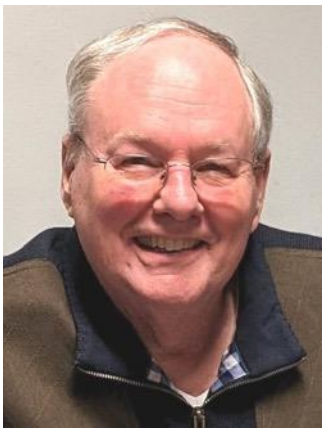
It may seem strange to make a trip like that just to play radio, but I needed to keep my activated all Ohio status. So far, only three of us can say that.

With the days getting shorter, I had time for only one more stop. Killbuck Marsh SWA spans the border of Wayne & Holmes Counties. I stopped by for 15 contacts but will be back for more. Since it was an All Time New One (ATNO) in the WWFF program, I really want to make it available for the folks in Europe. To do that using a mobile whip, I want to hit it earlier in the day than what I did.

The deadline for this article is Friday, but I just might be doing my annual Black Friday Rove that day. I'll tell you all about that next time. For now, Merry Christmas, and get out there and make some contacts! 73 DE WG8X

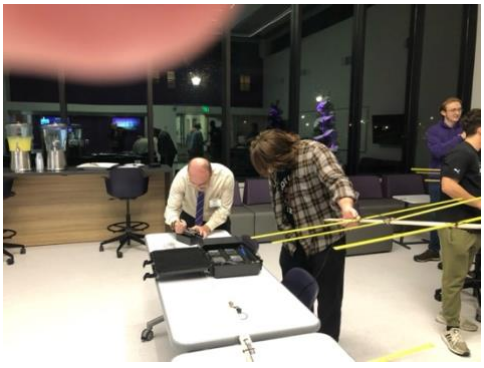
College Club Outreach

Jim, AC8NT



As most of you know I spend a lot of time demonstrating ham radio to varied audiences. These include demonstrations at libraries, schools, STEM events and colleges. One of my projects involves the college club at Mt. Union. Ham radio has been used as part of their major in Electrical Engineering.

Recently as part of their studies in antennas we setup a Tape Measure Yagi Build for their ham radio club. Students built the antenna, performed experiments and learned practical use of their NanoVNAs. They had a lot of fun learning about practical antennas. What can go wrong and how to make them work. We are planning a similar event at Kent State. We have also been asked to hold an antenna build for a couple of scout troops. Looks like there will be quite a few antennas built soon.



25th Annual SKYWARN Recognition Day

Originally Posted on ARRL.org

SKYWARN™ Recognition Day is December 7, 2024. The annual event is celebrating its 25th anniversary. SRD was established in 1999 by the National Weather Service and ARRL® to commemorate the contributions of SKYWARN volunteers. Using amateur radio and other means of communication, SKYWARN spotters provide real time ground truth to NWS offices. The ham-volunteers can also provide vital communications between NWS and local emergency management officials when other means go down.

In a video posted to the SRD web page, National Weather Service Director Ken Graham, WX4KEG, said the information ham radio operators and other SKYWARN volunteers provide is critical. "I, along with the entire National Weather Service, want to acknowledge and thank you for your invaluable service to the communities we serve."

There will be a SRD special event from 0000 – 2359 UTC on the day. The objective is for all amateur stations to exchange QSO information with as many Amateur Radio SKYWARN Spotters and National Weather Service Stations as possible on the 80, 40, 20, 15, 10, 6, 2-meter and 70-centimeter bands.

ARRL will be on the air during the event from the ARRL Radio Laboratory station, W1HQ, using the call sign WX1AW. ARRL Public Relations and Outreach Manager Sierra Harrop, W5DX, said SRD is a great opportunity to welcome non-ham SKYWARN volunteers to explore amateur radio. "Storm spotting was my original draw into ham radio. I watched a large tornado tear up my community on May 3, 1999, and was listening via my mom's 2-meter mobile radio to spotter reports being relayed to the NWS Norman, Oklahoma, office. I knew I wanted to be a part of that and within months I was licensed. Amateur radio was my path into that community service and has been the hobby of a lifetime ever since," she said.

ARRL has a web page to help those interested with getting licensed. Find details at https://www.arrl.org/getting-licensed.

Spotters are encouraged to register for SRD at https://www.weather.gov/crh/skywarnrecognition. There will be participation certificates available after the event.

CQWW CW Contests

Gary, WB2RPW

I participated in CQWW cw on November 23 &24 I operated 23 out of a possible 48 hours, so 23 hours 'In the chair'. I operated 10 through 40-meter CW thus 4 bands. I had 431 Q's with 66 multipliers. What was new was the fact that I worked South Africa (ZS5XT). The successful contesters accumulate a lot of points by working the multipliers. I worked 9 stations toward the end of the contest that netted me 18,000 points but I must say I am still learning to work the multipliers versus calling CQ. I guess everything is a learning cycle. I finished with a total score of 306,750 points.

PCARS Patches & Stickers

PCARS logo patches (***iron on***) & stickers (stick on) are now available!!

Put the patch on your hat, your shirt, your jacket and show off that PCARS logo!! The patch is about 3". The embroidery on the white patch is in Red, Black and Blue. Cost for a patch is only $2.00 each and can be obtained at any PCARS meeting. There are 2 types of stickers available - a 4" x 6" oval and a 3" x 10" bumper sticker. Stickers are $1 each. Show your pride in PCARS - Wear a patch, use the stickers! See the club Treasurer: **Greg, KA8TOA** or e-mail him at: Treasurer@portcars.org

PCARS T-Shirts, Polo Shirts, Jackets, Hats, etc. can be obtained from:

Villager Business Solutions - attention Michelle Zivoder
8088 Main Street
Garrettsville, OH 44231
michelle@villagerbusiness.com 330-472-7304

PCARS November Meeting Photos

DX ENGINEERING
A very sincere **THANK YOU**
for helping again this year with
the annual Center of Hope raffle.

Amelia DiGirolamo Center of Hope
the hand that feeds

PORTAGE COUNTY AMATEUR RADIO SERVICE
SINCE 2005

Hamfest Calendar

Here are the current listings of local Hamfests. Please note that all are subject to change. Stay current by checking the sponsoring club's web page before making your travel arrangements.

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12/07/2024 – Winter Hamfest – Location: Archibold, OH – Sponsor: FCARC

==========

01/19/2025 – Sunday Creek Amateur Radio Federation Hamfiest – Location: Shade, OH – Learn More

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04/05/2025 – Cuyahoga Falls Amateur Radio Club 69th Hamfest – Location: Cuyahoga Falls, OH – Learn More

==========

07/20/2025 – Van Wert Hamfest – Location: Van Wert, OH – Learn More

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Swap-N-Shop

FOR SALE: LDG Antenna Tuner 600 Pro Like new $300; Yaesu FT-840 Excellent condition and great for a new ham beginning HF. Still on air almost daily. $450. Call Carl, N4IT at 330-221-9725 [02/25]

FOR SALE: SteppIR 3 element yagi. Fully assembled but never in the air or on the air. I paid $1,951.20. Sell for half price. My loss, your gain. Bob Winston, W2THU, 216-924-3314 [01/25]

For Sale or Want Ad policy reminder: This is a PCARS ***members only benefit***. Please don't ask to list items for a friend, relative or SK estate unless they are/were a member of PCARS. Requests come in from all over the USA (and beyond) to list items for sale or wanted items and we just cannot dedicate that much space to non-members. Listings are good for 3 months unless canceled or changed earlier. The date listed after the contact information tells you when the ad expires - example: [01/24] indicates the ad will run until the end of January 2024.

Portable Ops Special Interest Group

John, WG8X
Portable Ops SIG Coordinator

No Portable Operations SIG In December

Hi everyone, this will my last Portable Operating SIG column. I'd like to thank those who've been with me attending these SIGs each month. I've enjoyed your fellowship while we talk about our shared love of all things portable.

But, after 3 years, it's time for fresh ideas. Also, I'm finding the 2nd Tuesday of each month to be a harder & harder day to schedule. It doesn't help that I'll be teaching a General class Study group for my local club on Tuesday evenings in a couple months.

As is customary, there will be no Portable ops SIG in December, so we can spend time with our families, enjoying the holiday season. Starting in January, this SIG will be led by Gene, W8NET. Please show him all the support that you've shown me these last few years.

Antenna Special Interest Group

Bob, N8QE
Antenna SIG Coordinator

No Antenna SIG In December

There will be no Antenna SIG in December, 2024 because of the busy Christmas Holiday Season.

I want to thank everyone who participated in the monthly PCARS Antenna SIGs in 2024. The PCARS Antenna SIGs will be held again starting in January 2025 under a new Moderator. It's been my privilege to serve as PCARS Antenna SIG Moderator for the past 2 plus years. See you down the log, or at a PCARS meeting.

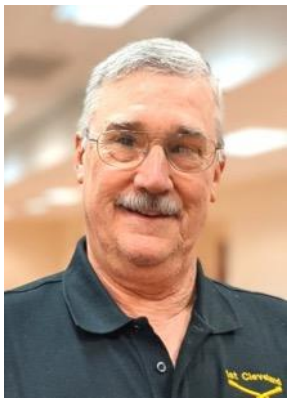
HF WAS & DX Nets Special Interest Group

Gene, W8NET
HF WAS & DX Nets SIG Coordinator

The HF WAS & DX Nets SIG meeting on December 2 will be at 7:30pm, NOT 7:00pm.

I will ask everyone in attendance to join me on the 3905 Century Club 40m SSB net and stay for one round (or more). The net starts at 0000z (8:00pm EDT). Depending on propagation, conditions, number of check-ins, etc. the first round will be done at 9:00-9:15pm. I will stay until everyone goes or the net closes.

Digital Special Interest Group



Rick, K8CAV
Digital SIG Coordinator

There is no Digital Special Interest Group meeting scheduled for December.

The next Digital Special Interest Group meeting will take place on **Tuesday January 7th** at 7:00 PM at the PCARS Club Site.

Digital Special Interest Group

Rick, K8CAV
Digital SIG Coordinator

The next Flex Net will take place on **Wednesday December 11th at 8:00 PM**. This month's net will take place on 2 meters FM phone on 147.495 MHz. Technician Class licensees have privileges here so come out and have some K8BF Big Fun with us!

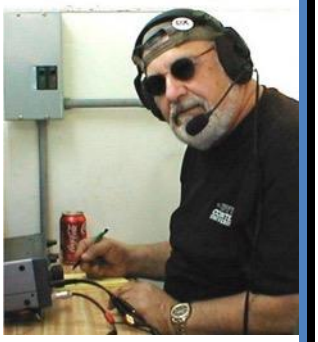
The Flex Net is a great place to contact other PCARS members and QSL for the PCARS A to Z Award. Information about this award can be found on the PCARS web site under the "Awards" tab. The net is a lot of fun and gives valuable feedback on how well your station is operating. I hope to hear you then!

Special Thanks to Leadership

Rick, K8CAV
Digital SIG Coordinator

PCARS has been blessed over the years to have people step up to take various leadership roles in the club, which are crucial to the success we have enjoyed. The year ending 2024 was no different in the quality of leaders that served. I would like to offer my most sincere thanks to Mike KP4VZ, Ken WA8LRW, Greg KA8TOA, Chuck W8PT, Mike KB8TUY, Gene W8NET, and Paul KE8EGF for serving in PCARS leadership roles that have greatly benefitted all of us as members.

Charlie the Tuner's HF High-Lites



Chuck, W8PT
a.k.a. "Charlie the Tuner

Greetings DXers

Charlie the Tuner's DX High-Lites November 2024

Greetings to all DXers:

Hello from Geauga County! I hope that you had a very satisfying Thanksgiving and you had your fill of turkey. I can almost bet that many of you still have leftovers. My family doesn't like turkey all that much so we opt for City Chicken. For you uninformed, that's pieces of beef and pork put on skewers and then breaded and browned and then put into a cooker. They melt in your mouth. (Remember to remove them from the skewers first.)

Well, that's a long way from DXing, but I'm never a long way from good food. We will have another chance for good food since this is December (duh) and Christmas is coming. That means Christmas trees and candy canes and mistletoe and PRESENTS under the tree. What have you asked Santa for? Did you remember to send him your letter? Are you hoping for that new rig or antenna? Maybe a new headset?? I'm sure that Tim and the many folks at DXE are waiting to hear from Santa so that they can load up his sleigh with all the things that you Hams have been wishing for. Frankly, these are the kinds of TOYS that I am waiting for.

And what better way to work that rare DX than with a brand new rig or antenna or other piece of equipment that will make your search for that rare one a lot easier. So let's see what we can expect this month and in a few that follow.

As always, big thanks to: The Daily DX, DL5ON & The DX News Letter, DXNews.com, DX-World.Net, 425 DX News, TenX DX News, DXNL for the following DX information.

This report "could" contain "Pirate/SLIM" operation or more likely a "BUSTED CALLSIGN". As always, you never know, so… - **"Work First, Worry Later".**

Here's ClubLog's Top 10 Most wanted DXCC entities:

1. **P5 DPRK (NORTH KOREA)**
2. **BS7H SCARBOROUGH REEF**
3. **CE0X SAN FELIX ISLANDS**
4. **BV9P PRATAS ISLAND**
5. **KH7K KURE ISLAND**
6. **KH3 JOHNSTON ISLAND**
7. **3Y/P PETER 1 ISLAND**
8. **FT5/X KERGUELEN ISLAND**
9. **YV0 AVES ISLAND**
10. **3Y/B BOUVET ISLAND**

December…

3D ROTUMA IS. 3D2Y Team will be active from Rotuma Island, IOTA OC - 060, 15 November - 4 December 2024. Team - W6IZT, W8HC, K4NHW, KD9LSV, LY7J and others. They will operate on HF Bands, including activity in CQ WW DX CW Contest, 23 - 24 November 2024. They will use 3D2Y call not 3D2Z as announced earlier.

3D2, FIJI. Theo, PA3CBH is QRV as 3D2TP from Viti Levu, IOTA OC-016, until December 12. Activity is on the HF bands using QRS CW and SSB with QRP power. QSL to home call.

5R8, MADAGASCAR. **Reminder** - Eric, F6ICX will again be active from **Saint Marie island, AF-090** as **5R8IC** until the end of December 2024. QRV on HF bands, mainly CW with some SSB. Last two weeks of activity he will dedicate to QO-100. QSL via LoTW, H/c.

9L5, SIERRA LEONE. 9L5A Team will be active from Sierra Leone, until 8 December 2024.
Team - Members of F6KOP Club. They will operate on 160 - 6m and QO - 100 satellite.
QSL via F5GSJ, LOTW, ClubLog OQRS.

A35, TONGA. A35GC Team will be active from Tonga, until 6 December 2024. Team - LZ1GC, LZ5QZ. They will operate on 160 - 6m, CW, SSB, FT4, FT8, RTTY. QSL via LZ1GC, LOTW, ClubLog OQRS.

AU, INDIA. AU2JCB is a special event call-sign to commemorate the birth date (30 NOV) & to pay homage & to tell about the great INDIAN scientist Acharya JAGADISH CHANDRA BOSE who is recognized as the "Father of Wireless Communication" by the scientific community of our world & IEEE.
VU2DSI will be operating with this call sign for the last 17 years since 2005& operate AU2JCB from 25 NOV 2022 to 13 DEC 2022. The Details of operation ---- Period----25 NOV 2022 to 13DEC 2022
Frequencies------- 10 M-- 28545, 28510,28490. 21 M—21235, 21310, 21350. 20M—14210, 14250, 14310. 40 M---7040, 7150. 80 M --- 3710. IN FM MODE----- 6M –50800, 51500. 10 M---29700.
Preferably the operation will be on higher bands according to propagation conditions.
QSL--- Direct to VU2DSI

C5, GAMBIA, **Reminder** - Jean-Louis, F6ITS has just received his Gambian license and will be active as **C5GM** until December 2024. When not on his sail boat, he will QRV from Lamin Lodge (Grid: IK13qj). Jean-Louis says he has restarted CW after more than 10 years inactivity so is sorry for any mistakes and his slow speed. QSL info to follow.

I, ITALY. Special event station II4RCDN is QRV until December 31 to celebrate 60 years of the Northern Cross Radio Telescope, one of the largest radio telescopes in the world. QSL to IZ4FUE.

J75, DOMINICA. J75K Team will be active from Dominica, IOTA NA - 101, 26 December 2024 - 4 January 2025. They will operate on 160 - 6m, CW, SSB, FT8. QSL via IV3JVJ direct, LOTW.

JD1, MINAMI TORISHIMA. Take, JG8NQJ is QRV as JG8NQJ/JD1 from Marcus Island, IOTA OC-073, until the beginning of March 2025. Activity is in his spare time on the HF bands using CW and FT8. QSL direct to JA8CJY.

KH0, MARIANA IS. Ken, JO1VRK plans to be active from Saipan, Mariana Islands as KH0/AJ6VJ during December 30, 2024 to January 3, 2025. QRV 40-20-17-15-12-10m. QSL via LoTW, eQSL – email for home address for paper QSL.

ON, BELGIUM. Special event station OO80BB will be QRV from November 16 to December 15 to commemorate the 80th anniversary of the Battle of the Bulge during World War II. QSL via operators' instructions.

RI4, ARTIC TOUR. **Reminder -** Oleg, RD1A is onboard "Severny Polyus / North Pole" and will be active when time permits as RI42SP as the ship travels through various parts of the Arctic. Primarily QRV on CW & FT8 from October 5th for approx one year. QSL via Club Log OQRS.

TL8, CENTRAL AFRICAN REPUBLIC. Elvira, IV3FSG will be active as TL8ES from M'Baiki, Central African Republic, 22 November - 9 December 2024. She will be active on HF Bands, SSB, Digital Modes. QSL via IK2DUW.

TO9, SAINT MARTIN. TO9W Team will be active again from Saint Martin Island, IOTA NA - 105, 30 November - 13 December 2024. They will operate on 160 - 10m, with focus on 40, 80, 160m.
QSL via W9ILY, LOTW, ClubLog OQRS.

UR, UKRAINE. **Reminder-** Special event station EM100WJZ will be QRV now until December 31 to commemorate the 100th anniversary of the first amateur radio activity from the ancient city of Lwow, now known as Lviv. QSL via UR4WWE.

V73, MAJURO ATOLL. Janusz, SP9FIH will be active as V73WE from Majuro Atoll, IOTA OC - 029, Marshall Islands, until 13 December 2024. He will operate on 40 - 10m. QSL via home call, ClubLog OQRS.

VU, INDIA. Datta, VU2DSI is QRV as AU2JCB until December 16 to commemorate the birthdate of Indian physicist and radio pioneer Jagadish Chandra Bose. Activity is on 80 to 6 meters using SSB, and FM on 10 and 6 meters. QSL direct to home call.

VU4, PORT BLAIR ANDAMAN and NICOBAR IS. Krish, W4VKU will be active from Andaman Islands, until 11 December 2024. Plans are for SSB and FT8. Please no paper cards via Bureau. I will open up ClubLog OQRS for Bureau requests later on, once the direct OQRS requests are done with.

ZL, NEW ZEALAND. Special event station ZM100DX will be QRV until December 26 to celebrate the very first trans-world QSO between Z4AA and G2SZ. Activity will be on 160 to 6 meters using all modes. In addition, special event station ZL4AA will also be active for this event. QSL via operators' instructions.

ZS7, ANTARCTICA. Oleg, ZS1ANF is QRV as ZS7ANF from Wolf's Fang Runway, Queen Maud Land, IOTA AN-016, until late February 2025. Activity is on 40 to 10 meters using mainly CW. QSL via DL5EBE.

Look Ahead & Reminders…

5N9, NIGERIA. 5N9DTG Team will be active from Abuja, Nigeria in January 2025. Team - Members of the Rebel DX Group. They will operate on 160 - 6m, CW, FT8 and possible SSB. QSL via ClubLog OQRS.

DU, PHILIPPINES. Christian, F4EBK is QRV as DU3/F4EBK from Luzon Island, IOTA OC-042, until January 2025. Activity is on 20, 15 and 10 meters typically around 0900 and then after 2100z. QSL via F4EUO.

TR, GABON. Roland, F8EN is QRV as TR8CR until the end of January 2025. Activity is on the HF bands using CW. QSL via F6AJA.

My usual disclaimer: These DX events can change due to various reasons that sometimes are out of the control of those who are doing the planning. Don't get too upset if a planned DXpedition to some part of the world that

you need, doesn't happen. But use this info to hunt down your ATNO or simply to work some DX before your rigs become boat anchors.

Get on the air and work some DX!! 73 for now….*Chuck W8PT aka Charlie the Tuner*

73 for now….*Chuck W8PT aka Charlie the Tuner*

From Around The World…

Links from Here, There, and Everywhere

A mushroom cloud of white smoke emerged accompanied by an assortment of hissing, arcing, and bubbling sound effects. It was a really bad day for my hard-working Drake L7 amplifier, or as my fellow technical author and ham radio friend Eric Nichols KL7AJ quipped, "If this happened at the Vatican, everyone would know that we had a new Pope."
https://www.nutsvolts.com/magazine/article/when-fans-go-bad

Battery Pack Failure Modes I Have Known
https://www.nutsvolts.com/magazine/article/battery-pack-failure-modes-i-have-known

Build the Retro Regen Radio
https://www.nutsvolts.com/magazine/article/may2015_Whipple

Packet Radio Fun on the Mac – A Beginning
https://www.kc8jc.com/2024/11/12/packet-radio-fun-on-the-mac-a-beginning/

Ham Radio for Hackers – All the seats were full because they actually wanted to learn more about Amateur Radio
https://www.kb6nu.com/video-ham-radio-for-hackers-at-hope-xv/

PCARS Ham Radio License Plates Wanted !!! PLEASE !!

Dig out that amateur radio call sign license plate (with your present call sign), clean it up and bring it to be permanently affixed to the wall in the PCARS club station.

We have 80 PCARS member's ham plates now, **but we can use more**. Don't have ham radio call plates on your vehicle? Well for those of you in Ohio, you can get the plates sent to you by going to any License Bureau office and filling out the special plate registration form. Have a copy of your current FCC license when you apply. The official form to obtain your Ohio Amateur Radio license plates is on the PCARS IO Group site. Then you'll have an old plate to bring in to get hung up as a ***permanent*** **part of PCARS history**.

From the Ohio BMV:

General Information: Owners or lessees of motor vehicles who are residents of Ohio and hold an unrevoked and unexpired official amateur radio station license issued by the Federal Communications Commission may apply for these plates. The official call letters will be the license plate numbers.

Registrant Eligibility: **Owner must submit a copy of the un-revoked and unexpired official amateur radio license issued by the Federal Communications Commission. (FCC).**

Title Requirements: Ohio Certificate of Title issued in the same name as the FCC license, either singly or jointly, or the name on the FCC license is the same name on the lease agreement.

Vehicle Information: These plates may be issued to passenger vehicles, non-commercial trucks, recreational vehicles, house vehicles and non-commercial trailers.

Type of Plates: Plates will be manufactured with the FCC license.

Issuance Information: Amateur Radio plates cannot be issued with system assigned, reserved, or personalized plate formats.

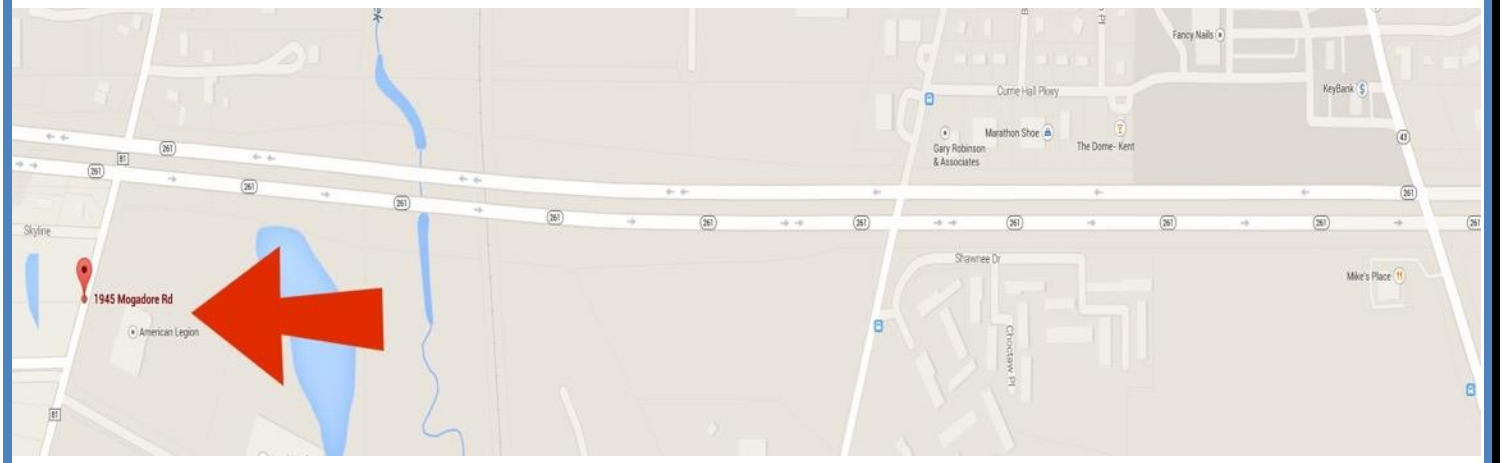
Renewal of plates can be done at your local Deputy Registrar or by mail using their renewal notice. **Amateur Radio License Holders must provide a copy of their current unexpired and unrevoked official amateur radio license issued by the Federal Communications Commission (FCC) at the time of *any type renewal transaction*.**

All plates will be mailed directly to the address on your registration card unless customer requests otherwise. The deputy will issue your registration card, stickers and provide you with a permit which will allow you to operate your vehicle while your plates are being manufactured. Special license plate applications are available at all Deputy Registrar license agency locations. These plates cost an additional $10.00 annually plus the normal registration fees. The fee is determined by Ohio Revised Code section 4503.14.

PCARS Meetings

The Portage County Amateur Radio Service (PCARS) in-person meetings are held the **2nd Monday** of each month and start at 7:00 pm.

The meetings are held at The American Legion, Post 496
1945 Mogadore Road - in Kent. (Just South of Route 261)



The American Legion Post 496 is located on the southeast corner of State Route 261 and Mogadore Rd. The driveway is on the south side of the building and as you enter you will pass through a parking lot on the south side of the building. Please do not park in this lot but instead continue on to the parking lot on the east side of the building which is the near the rear entrance into the Post 'Canteen'. As you enter the post from this entrance you'll see a bar to the left and a dining area to the right. The meeting area we'll be in is on the right, to the rear of the dining area.

The picture on the left shows The American Legion Post 496 as viewed from Mogadore Road. (looking East)

The menu consists of your basic burger / dog / chicken sandwiches, wings, fries, onion rings, and salads. There is also an appetizer selection as well. Adult beverages are available and costs are in line with what you would expect at most bar-restaurant facilities.

If you are a member of The American Legion, The American Legion Auxiliary, or the Sons of The American Legion, bring your ID card as you get a substantial discount on adult beverage pricing.

PCARS VE Testing Information & News

Tom, KB8UUZ
PCARS VE Team Liaison

Future Dates
December 7th
***** Check the website for the latest information *****

On behalf of the VE team at PCARS, we all look forward to seeing you at the PCARS club site in Ravenna so you can take your license test or an upgrade to your existing license. Face masks are not State/County mandated at this time, but you are always welcome to wear one.

PCARS VE sessions are scheduled for 9:45 am Registration, 10:00 am Testing starts, on the first Saturday of every even numbered month at the PCARS club site in Ravenna. Any questions? Contact KB8UUZ@gmail.com

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QUICK FACTS

- **Yes**, PCARS VE test Sessions are held at the club site in Ravenna starting at 10 am - see schedule.
- **Walk-Ins are accepted**. Would appreciate an email to KB8UUZ@GMAIL.COM if you plan on attending.
- You **MUST** have an **FRN Number** (SSNs no longer accepted) **Taking Technician Test?** - You **MUST** apply for your **FRN** and get it prior to testing
- You **MUST** have a **valid e-mail address** for the FCC to be able to contact you.
- **Picture ID required**
- **Original and Copy of your valid FCC license** and originals of any applicable **CSCE**
- **VE fee is $15** - Cash or Check payable to "ARRL-VEC"
- **FCC License Fee $35** - payable **after** FCC sends you a link. **DOES NOT APPLY to upgrades**
- **17 years old or younger? VE Fee is $5** per the ARRL reduced CE fee Youth Program
- **17 years old or younger? ARRL will reimburse you the $35 FCC Fee**

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Okay - now all the Details:

- **If you are sick, have a cough, a high temperature or have been exposed to COVID-19 or other communicable germs, or someone that has been infected - please, *do not* come to the club site. *Use of masks is optional*.**
- **No food or snacks allowed.**
- **Ensure you have the following:**
  - **A picture ID such as a valid Driver's License, State ID, School ID, or US Passport.**
  - **If you are under 16 years of age, a parent or guardian must be able to vouch for you and you need a copy of your birth certificate (you do not have to give us a copy, we just have to see and verify).**
  - **If you are upgrading to General or Extra - You MUST bring your original valid amateur radio license and a copy of your valid amateur radio license to turn in with your Form 605.**
  - **Calculators are okay to use (if you need one) as long as the memories are cleared.**
  - **NO cell Phones allowed**

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First-Time Exam Applicants MUST Obtain FCC Registration Number BEFORE Taking Exam - All amateur examination applicants are **required** to provide an FCC Registration Number (FRN) to the Volunteer Examiners (VEs) **BEFORE** taking an amateur exam. This is necessary due to changes the FCC has made to its licensing system. Applicants will create an FCC username and account, respond to the verification email from FCC, and then register for the FRN. Register on the FCC's Commission Registration System (**CORES**): **https://apps.fcc.gov/cores/**

Email Addresses REQUIRED - All applications are required to contain an email address for FCC correspondence. Applicants will receive an email direct from the FCC with a link to the official electronic copy of their license whenever a license is issued or changed. ARRL VEC suggests that those without access to email to use the email address of a family member or friend. Licensees will be able to log in to the ULS using their FRN and password to download the

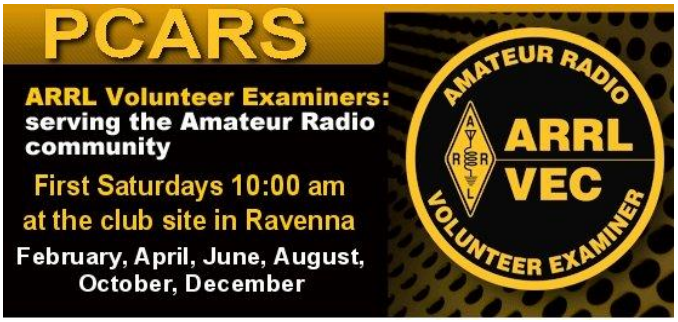
latest version of their license at any time. The FCC no longer provides paper license documents via regular mail.

FCC - $35 Amateur Application Fee - The Federal Communications Commission (FCC) staff has clarified in response to an ARRL request that the new $35 application fee will **not apply** to **upgrade to an amateur radio licensee's operator class and changes to club station trustees**. The new fees will apply only to applications for a **new** license, **renewal**, rule waiver, or a **new vanity call sign**.

VECs and Volunteer Examiner (VE) teams will not collect the $35 fee at exam sessions. New **applicants will** pay the $15 exam session fee to the ARRL VE team as usual.

When the FCC receives the examination information from the VEC, it will email a link with payment instructions to each successful candidate. The candidate will have **10 calendar days,** from the date of the application file number being issued, to pay. After the fee is paid, and the FCC has processed an application, examinees will receive a second email from the FCC with a link to their official license. The link will be good for 30 days.

Youth Licensing Grant Program - The ARRL Youth Licensing Grant Program, in effect since April 19, 2022, will cover the one-time $35 application fee for **new** amateur radio license candidates **17 years old or younger** for tests administered under the ARRL Volunteer Examiner Coordinator (VEC) program. The $35 Federal Communications Commission (FCC) application fee will be reimbursed after the ARRL VEC receives the completed reimbursement form and after the new license has been issued. The reimbursement check will be mailed to the fee payer. Also, candidates 17 years old or younger would pay a reduced exam session fee of $5 to the ARRL VE team at the time of the exam. The $5 fee is for all candidates 17 years old or younger, regardless of the exam level taken. Proof of under 18 status is required.



Visit the ARRL website for the program instructions and reimbursement form at www.arrl.org/youth-licensing-grant-program.

Printing Your FCC License

Print an Official or Unofficial Copy of Your Amateur Radio License

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
AMATEUR RADIO LICENSE

KE3GK

NONE

As of February 17, 2015, the **FCC no longer routinely issues paper license documents** to Amateur Radio applicants and licensees. The Commission has maintained for some time now that the official Amateur Radio license authorization is the electronic record that exists in its Universal Licensing System (ULS). The FCC will continue to provide paper license documents to all licensees who notify the Commission that they prefer to receive one.

Licensees also will be able to print out an official authorization — as well as an unofficial "reference copy" — from the ULS License Manager.

I've created a set of instructions on how you can request an **"official" printed copy of your license*** Click here to download the instructions

Thanks & 73

J.C., KC8JC
PCARS Newsletter Editor

It's safe to assume that most of us were starting to get a little spoiled by the warmer temperatures this November, but as I look out the window now, my lawn is dusted with snow. That means that I will be going out to the parks in my heavy winter gear from here on out. It's not the cold so much as the wind that gets me these days, but as the Scouts say: There's no bad weather; just insufficient gear.

With the arrival of winter proper, I'm sure we'll all be heading indoors to our shacks and tuning up for a winter of whatever the hobby has to offer. I know that I have a kit or two that have been waiting for me on the bench for weather just like this. Let's see if the soldering iron will keep me warm.

I also want to thank our outgoing club officers for their outstanding performances this year. We all benefit from their hard work and dedication. I'd also like to welcome our new officers and thank them for stepping up. I know that we'll have a great 2025 under the incoming leadership (some of whom I know a little better than others).

Be sure to send your inputs on any ham radio topic to me at KC8JC@portcars.org and you may well find yourself in the great company of our many prestigious *Award Winning Newsletter* contributors.

Thank you to all those who sent inputs for this month's issue:

AC8NT, K8CAV, KA8TOA, KB8UUZ, KE8TQR, KP4VZ, N8QE, W8NET, W8PT, WA8LRW, WB2RPW, WG8X, The ARRL, and the World Wide Web.

Remember: With ***YOUR*** continued help, ***WE*** can keep making this a ***GREAT*** newsletter!

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The Portage County Amateur Radio Service, Inc. (PCARS) - Ohio

~ The Hamvention® 2018 "Club of the Year" ~

PCARS meets the second Monday of each month at the **Kent American Legion Post 496**.
1945 Mogadore Rd. - just South of Rt. 261 - Enter the rear of the building for the meeting room.
Meeting starts at 7:00 pm - All are welcome to attend ~ Stop in and say hello!
PCARS uses the **K8IV** repeater: **146.895 MHz PL 118.8** in Sugar Bush Knolls ~ EchoLink Node: **K8BF-L**
Check PCARS out on the web: www.PORTCARS.ORG

~ 2024 Officers ~	2024 PCARS Appointments & Committees		
President – Mike Gonzalez – KP4VZ Vice President – Ken Hall – WA8LRW Treasurer - Greg Ash - KA8TOA 1 Year Trustee – Chuck Patellis – W8PT 2 Year Trustee Mike Ryan – KB8TUY 3 Year Trustee – Gene Marsh – W8NET Past President – Nick Wagner – AC8QG	ARRL Awards - DXCC	W8KNO	Joe Wehner
	Club Site Manager/Liaison	K8CAV	Rick Kruis
	Contest Coordinator	W8PT	Chuck Patellis
	EchoLink	AC8NT	Jim Wilson
	Field Day Chairman, 2024	WA8AR	Tony Romito
	FYAO Chairman	W8PT	Chuck Patellis
	K8BF Callsign Trustee	N8QE	Bob Hajdak
	K8BF QSL Manager	N8QE	Bob Hajdak
	Membership Chairman		
	Net Control Coordinator	KA8TOA	Greg Ash
	Newsletter Editor	KC8JC	J.C. Wilson
	OSPOTA Chairman	KB8UUZ	Tom Parkinson
	PCARS Photographer		
	Public Information Officer		
~ Meetings & Net ~	Secretary	KE8EGF	Paul Hyland
2nd Monday of each month. 7pm Thursday night Club Net at 8 pm on 146.895	Social Media	N8WCP	Mike Szabo
	Tech, Gen & Extra Class Mgr.	AC8NT	Jim Wilson
	Volunteer Examiner Liaison	KB8UUZ	Tom Parkinson
	Webmaster	KP4VZ	Mike Gonzalez
	POTA Coordinator	KE8ARB	Brandon Mercer

Active PCARS Volunteer Examiner Team Members			
	KB8UUZ	Tom	Parkinson
	AC8NT	Jim	Wilson
	AC8QG	Nick	Wagner
	N8QE	Bob	Hajdak
	KA8TOA	Greg	Ash
	WA8CCU	Al	Nagy
	N8FUM	Dan	Torchia
	KC8JC	James	"J.C." Wilson
	W8EC	Mark	Haas
	K8IG	Fred	Freer
	W8HFZ	Tim	McLeod
	K8PJW	Phil	Weiss
	N8XTH	Deron	Boring
	K8IV	Ed	Polack
	N8AMY	Amy	Leggiero
	W8PT	Chuck	Patellis
	KP4VZ	Mike	Gonzalez

THE RADIOGRAM

PCARS Incorporated
Nov. 1, 2005

First Meeting
Nov. 14, 2005

ARRL Affiliation
April 20, 2006

Special Service Club
March 22, 2010

The RADIOGRAM copyright ©2024, is the official newsletter of the **Portage County Amateur Radio Service, Inc. (PCARS) - Hamvention® 2018 Club Of The Year. The RADIOGRAM is an *Award Winning* newsletter: ARRL Ohio Section Newsletter - Fourth Place 2024 - Third Place 2015, 2022 - Second Place 2014, 2016, 2020 - First Place 2012, 2013, 2017, 2018, 2019, 2021, 2023. ARRL Great Lakes Division Newsletter - Second Place 2013 - First Place in the 2017, 2020 and 2021.**
Articles are the opinion of the authors and not necessarily those of PCARS. Or, better yet, let me express it this way: "These are my opinions and only my opinions, unless you share them as well, which would make them our opinions, but I am not of the opinion that I can express your opinion as my opinion without your prior expression of said opinion, and then my re-utterance of that opinion would, in my opinion, be foolish unless I were expressing agreement to your opinion, and then it wouldn't be my opinion but your opinion to which I only agree." ***GO AHEAD - STEAL THIS NEWSLETTER!*** **You have our permission to post, e-mail, copy, print, or reproduce this newsletter as many times as you like, but please do not modify what you use. If you use material in this newsletter, all we ask is that you give credit to PCARS along with the author of the article.** Caution - some of the articles in this newsletter maybe covered by copyright - *please* do not copy and use the ones that have by-line information unless you obtain permission from the original author. If you're not sure, drop an e-mail to KC8JC@portcars.org. **The RADIOGRAM** always obtains written permission for reproducing copyright material. **The RADIOGRAM** comes out the first day of each month (usually), please have inputs submitted by 8 pm ET on the last Friday of each month. ARES® (Amateur Radio Emergency Service®) is a program of, and both logos are registered trademarks (used with permission) of the American Radio Relay League, Inc. ARRL, the National Association for Amateur Radio™. **Why the Black Squirrel in our logo?** For those of you not familiar with it: The Black Squirrel is commonly seen around Portage County, Ohio. Legend has it that some of these little guys and gals got loose from Kent State University back in 1961 and they migrated and thrived throughout our county. Look into the black squirrel legends and see what you find! **When you spot a black squirrel – think PCARS!**

The RADIOGRAM is published every month and only sent to subscribers. If you would prefer not to receive this newsletter, we understand. We'll try not to take it personally. It's not you saying you don't like us, but maybe you just don't have the time to look at all this hard work we've done just for you. Hey, that's cool. But if your heart is truly set on making sure you no longer receive this newsletter, even though we promise to one day reveal the meaning of life in it and you're going to be really upset when you miss out on that, we can take you off the e-mail list. Send your newsletter inputs (**in .TXT format**) along with **in-focus** pictures (not small 50 kb photos) to the newsletter editor: KC8JC@portcars.org

By attending PCARS in-person activities, you are acknowledging that an inherent risk of exposure to COVID-19 exists in any public place where people are present. By attending PCARS in-person activities, you voluntarily assume all risks related to exposure to COVID-19 and covenant not to sue and agree not to hold the Portage County Amateur Radio Service (PCARS) or any of their directors, officers, contractors, vendors or volunteers liable for any illness or injury. While PCARS implements preventative measures to reduce the spread of COVID-19 in accordance with Federal, State and Local guidelines, we cannot guarantee that attendees will not become infected with COVID-19 as a result of attendance.

Portage County Amateur Radio Service (PCARS)
705 Oakwood Street - Box 12
Ravenna, OH 44266 USA

NLC